Going wild over turkeys is a November tradition

LLNL's wild side

By Jessie Coty

As Thanksgiving approaches, it seems fitting to contemplate the wild turkey as the national symbol that it nearly became. Just after signing the Declaration of Independence, the Continental Congress appointed a three-member committee to design a national seal. Thomas Jefferson, John Adams and Benjamin Franklin all had different ideas; none included the bald eagle. Franklin wanted the wild turkey as the national bird and was disappointed by the decision made in 1782 to use the bald eagle, as he felt that the bald eagle was of "bad moral character." Despite this choice to overlook the wild turkey, it still runs high in our national attention every November.

A "down-to-earth" sort of bird

Anyone that walks, runs, or cycles the roads surrounding the Laboratory may be familiar with a heavily feathered rush of round-bellied birds flying suddenly and low across the road. With this low flight display, it's not a surprise that the wild turkey *(Meleagris gallopavo)* belongs to the order *Galliformes* (ground-nesting fowl). Except for roosting, it spends its time on the ground. Although the turkey doesn't fly often nor far, it reaches flying speeds of 45-50 mph; it also has a respectable 15-mph running speed.

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Left: Wild turkeys investigating a new habitat, parking lots. Above: A displaying wild turkey *(Meleagris gallopavo)*.

The wild turkey is a highly gregarious flocking bird; it's not a rare experience to see a large group of turkeys standing together in a field or along the roadside. Breeding behavior is triggered with lengthening daylight in winter; males (toms or gobblers) gobble and display for females (hens). The hens lay an egg a day until reaching a clutch size of 10-12 eggs. Incubation is about 28 days and precocial poults quickly learn survival skills by imprinting on their mother and learning her behaviors. They fly and roost in trees by two weeks, reach adult size by three to four months and achieve sexual maturity by one year.

Wild turkeys look for two key components in their habitat: trees and open grasslands. The trees provide food, nighttime roost sites and cover; grasslands provide well-covered forage and nesting areas. Wild turkeys are omnivores and they consume a wide variety of plants (including agricultural crops) and animals (largely invertebrates).

Another Californian not from California

Although the wild turkey is native to North America and occurs widely across the United States, it was not present in California at the time of European settlement. Like many of us, the wild turkey is yet another transplant (non-native). To complicate matters, wild turkeys are comprised of six subspecies, of which California is now home to three: the Rio Grande, Merriam's, and eastern turkeys. A "California Hybrid" also occurs, a result of subspecies interbreeding.

The first known introduction of a wild turkey to California occurred in 1877 by private ranchers on Santa Cruz Island. Beginning in 1908, the California Department of Fish and Game (CDFG) purposefully released turkeys to establish populations across the state. A breeding stock was used for periodic releases; these domesticated birds lacked the survival and reproduction skills necessary for the wild. In 1951, the CDFG moved to a program of wild turkey releases (capture and translocation of wild birds), which proved successful at establishing sustainable populations. It released nearly 3,000 and 950 turkeys between 1959-1988 and 1989-1999, respectively. Estimates show that the birds now occupy approximately 29,000 square miles (18.5 percent) of the state with a density of 8.3 turkeys per square mile (approximately 242,000 wild turkeys).

Popular game species or unpopular nonnative nuisance?

The wild turkey is the largest game bird in the state. Maintaining this species for hunters and wildlife viewing is an important objective for the CDFG; sport hunting for wild turkey is popular and highly valued.

Historically, the first open season for hunting wild turkey occurred in 1968 (one county). As turkeys became more abundant, hunting season opened across remaining counties. By 1979, two-season (fall and spring) hunting occurred across the state. However, spring season hunting is considered more biologically sustainable for wild turkey populations. A harvest of up to 30 percent of males in spring is not considered to effect turkey population growth, yet harvesting more than 10 percent of the fall population often results in population declines (due to harvesting females). As a result, California changed its hunting regulations in 1998, to encourage spring hunting. By careful management of the spring and fall hunting seasons, the CDFG can ensure sustainable populations across California, without requiring further releases.

Yet, the distribution of turkeys varies quite a bit across the state. High densities of turkeys can have negative impacts in residential, agricultural and park lands. The turkey, once nominated for status as our national bird, is often considered a nuisance; it damages gardens and landscaping, defecates in public areas, exhibits aggressive behavior and incurs agricultural depredation. It eats wine grapes, although video cameras prove other species also are to blame. Finally, parks have a mandate to promote and protect native species; conflicts therefore arise with nonnative turkeys.

The wild turkey presents a common conundrum for environmental agencies who must balance their efforts to ensure sustainable populations of species for recreational purposes while minimizing their detrimental effects. For wild turkey management, this means reducing populations in problematic areas while enhancing populations in other areas. You can help this management effort by not feeding turkeys, not releasing domestic turkeys and by celebrating the turkey on Thanksgiving as "national bird" for the day.